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cancel.*

protective cover superposed above the two-dimensional transducer element matrix such that acoustic energy incident at the protective cover is mechanically directed by the protective cover and wherein the transducer element matrix array is encased by the protective cover and the transducer body; and

an image processing system coupled to the transducer and configured to provide a plurality of individualized excitation signals each being delayed by a predetermined delay with respect to each other to control respective transducer elements of the plurality of transducer elements at different times for controlling the transmit aperture of the acoustic imaging system over time such that the two-dimensional transducer element matrix array generates and transmits acoustic energy through the protective cover over time such that acoustic energy transmitted through the protective cover is electronically focused.

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18. (Replaced) A method for acoustically imaging a patient, comprising the steps of:

providing a transducer having a two-dimensional transducer element matrix array, the transducer having a protective cover configured to mate with a transducer body, the protective cover superposed above the two-dimensional transducer element matrix such that acoustic energy transmitted from the protective cover and into the body is mechanically directed by the protective cover, wherein the two-dimensional transducer element matrix array and the protective cover are shaped to reduce patient discomfort;

generating a plurality of time delayed transmit signals each for separately controlling a respective transducer element of the two-dimensional transducer element

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matrix array to electronically focus acoustic transmit waves that traverse the protective cover; and

receiving a plurality of time delayed response echoes at the separately controllable individual transducer elements of the two-dimensional transducer element matrix array to electronically focus acoustic receive echoes that traverse the protective cover.

REMARKS

This application has been reviewed in light of the Office Action mailed on May 28, 2002. Claims 1-22 are pending in the application with Claims 1 and 18 being in independent form. By the present amendment, Claims 16 and 17 have been canceled and Claims 1 and 18 have been replaced. No new matter or issues are believed to be introduced by the amendments.

I. Rejection of Claims 16 and 17

Claims 16 and 17 were rejected under 35 U.S.C. § 112, second paragraph. Claims 16 and 17 have been canceled. Accordingly, withdrawal of the rejection is respectfully requested.

II. Rejection of Claims 1, 4, 6-15, 18, 19 and 21

Claims 1, 4, 6-15, 18, 19 and 21 were rejected under 35 U.S.C. §102(a) as anticipated by U.S. Patent No. 5,083,568 issued to Shimazaki et al. on January 28, 1992 ("Shimazaki et al.") or U.S. Patent No. 6,153,967 issued to Kobayashi et al. on November 28, 2000 ("Kobayashi et al.").

Independent Claims 1 and 18 have been amended to recite limitations not disclosed or suggested by the cited references and to better define the Applicant's